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SEQUENCE LISTING

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TECH CENTER 1600/2900

<110> CHEUNG, Nai-Kong V.

<120> USES OF MONOCLONAL ANTIBODY 8H9

<130> 638-B

<140> Not Yet Known

<141> 2002-03-08

<150> PCT/US01/32565

<151> 2001-10-18

<150> 60/241,344

<151> 2000-10-18

<150> 60/330,396

<151> 2001-10-17

<150> 09/982,645

<151> 2001-10-18

<160> 14

<170> PatentIn version 3.1

<210> 1

<211> 731

<212> DNA

<213> 8H9scfv cDNA sequence

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cctgaacagg gacttgagtg gattggatgg atttttctct gagatggtag tactcaatac 180
aatgagaagt tcaagggcaa ggccacactg actacagaca catcctccag cacagcctac 240
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acggctacct ggtttgctta ctggggccaa gggaccacgg tcaccgtctc ctcagatgga 360
ggcgggttcag gcgagggtgg ctctggcggg ggcggatcgg acatcgagct cactcagtct 420
ccaaccaccc tgtctgtgac tccaggagat agagtctctc tttcctgcag ggccagccag 480
agtattagcg actacttaca ctggtaccaa caaaaatcac atgagtctcc aaggcttctc 540
atcaaatatg cttcccaatc catctctggg atccccctca ggttcagtgg cagtggatca 600
gggtcagatt tcaactctcag tatcaacagt gtggaacctg aagatggttg agtgtattac 660
tgtcaaaatg gtcacagctt tccgctcacg ttcgggtgctg ggaccaagct ggagctgaaa 720

caggcggccg c

731

<210> 2
<211> 243
<212> PRT
<213> 8H9scfv amino acid sequence

<400> 2

Gln Val Lys Leu Gln Gln Ser Gly Ala Glu Leu Val Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Asp Ile Asn Trp Val Arg Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile
35 40 45

Gly Trp Ile Phe Pro Gly Asp Gly Ser Thr Gln Tyr Asn Glu Lys Phe
50 55 60

Lys Gly Lys Ala Thr Leu Thr Thr Asp Thr Ser Ser Ser Thr Ala Tyr
65 70 75 80

Met Gln Leu Ser Arg Leu Thr Ser Glu Asp Ser Ala Val Tyr Phe Cys
85 90 95

Ala Arg Gln Thr Thr Ala Thr Trp Phe Ala Tyr Trp Gly Gln Gly Thr
100 105 110

Thr Val Thr Val Ser Ser Asp Gly Gly Gly Ser Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Asp Ile Glu Leu Thr Gln Ser Pro Thr Thr Leu
130 135 140

Ser Val Thr Pro Gly Asp Arg Val Ser Leu Ser Cys Arg Ala Ser Gln
145 150 155 160

Ser Ile Ser Asp Tyr Leu His Trp Tyr Gln Gln Lys Ser His Glu Ser
165 170 175

Pro Arg Leu Leu Ile Lys Tyr Ala Ser Gln Ser Ile Ser Gly Ile Pro
180 185 190

Ser Arg Phe Ser Gly Ser Gly Ser Gly Ser Asp Phe Thr Leu Ser Ile
195 200 205

Asn Ser Val Glu Pro Glu Asp Val Gly Val Tyr Tyr Cys Gln Asn Gly
210 215 220

His Ser Phe Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
225 230 235 240

Gln Ala Ala

<210> 3

<211> 243

<212> PRT

<213> Mutated 8H9 scFv with decreased normal tissue adherence

<400> 3

Gln Val Lys Leu Gln Gln Ser Gly Ala Glu Leu Val Glu Pro Gly Ala
1 5 10 15

Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Asp Ile Asn Trp Val Arg Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile
35 40 45

Gly Trp Ile Phe Pro Gly Asp Gly Ser Thr Gln Tyr Asn Glu Lys Phe
50 55 60

Lys Gly Lys Ala Thr Leu Thr Thr Asp Thr Ser Ser Ser Thr Ala Tyr
65 70 75 80

Met Gln Leu Ser Arg Leu Thr Ser Glu Asp Ser Ala Val Tyr Phe Cys
85 90 95

Ala Arg Gln Thr Thr Ala Thr Trp Phe Ala Tyr Trp Gly Gln Gly Thr
100 105 110

Thr Val Thr Val Ser Ser Asp Gly Gly Gly Ser Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Asp Ile Glu Leu Thr Gln Ser Pro Thr Thr Leu

130 135 140
 Ser Val Thr Pro Gly Asp Gln Val Ser Leu Ser Cys Arg Ala Ser Gln
 145 150 155 160
 Ser Ile Ser Asp Tyr Leu His Trp Tyr Gln Gln Lys Ser His Glu Ser
 165 170 175
 Pro Gln Leu Leu Ile Lys Tyr Ala Ser Gln Ser Ile Ser Gly Ile Pro
 180 185 190
 Ser Arg Phe Ser Gly Ser Gly Ser Gly Ser Asp Phe Thr Leu Ser Ile
 195 200 205
 Asn Ser Val Glu Pro Glu Asp Val Gly Val Tyr Tyr Cys Gln Asn Gly
 210 215 220
 His Ser Phe Pro Leu Thr Phe Gly Ala Gly Thr Glu Leu Glu Leu Glu
 225 230 235 240
 Gln Ala Ala

<210> 4
 <211> 22
 <212> DNA
 <213> [32P]r Probe

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<210> 5
 <211> 21
 <212> DNA
 <213> Primer: ESBP1

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<210> 6
 <211> 23
 <212> DNA
 <213> Primer: ESBP2

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 ccgttgctct gtattcttac tga 23

<210> 7
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<212> DNA
<213> Primer: EWS 696

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<210> 8
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<212> DNA
<213> Primer: FLI 1 1041

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ttgaggccag aattcatgtt 20

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<213> Primer: G6PD1

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ccggatcgac cactacctgg gcaag 25

<210> 10
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<213> Primer: G6PD2

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gttccccacg tactggccca ggacca 26

<210> 11
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<212> DNA
<213> Lightcycler Hybridization Probe: EWSHP1

<400> 11
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<210> 12
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<210> 13
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<212> DNA
<213> Lightcycler Hybridization Probe: G6PDHP1

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<210> 14
<211> 28
<212> DNA
<213> Lightcycler Hybridization Probe: G6PDHP2

<400> 14
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